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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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08/924,785 09/05/97 PRATT

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EXAMINER

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10/29/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

[Signature]

Office Action Summary

Application No.

08/924,785

Applicant(s)

PRATT, RICHARD W.

Examiner

B. PRIETO

Art Unit

2152

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 May 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-46 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-46 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) ☐ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 19.
- 18) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other: _____.

Detailed Action

1. This office action is in response to Request for reconsideration filed 05/11/01, claims **1-46** remain pending.
2. Quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action may be found in previous office action:
3. Claims 1-2, 4-15, 17-28, 30-38, 40-43, and 45-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hogan et. al (Hogan) U.S. Patent No. 5,778,368 in view of Lindholm U.S. Patent No. 5,859,982.

Regarding claim 1, 13, 27 Hogan teaches features of the invention substantially as claimed, Hogan a method/means for manufacturing a network device comprising the steps of: obtaining a network device control software program from a network device such as a web server(s) system (Fig. 2, A, B, C); obtaining a downloadable unit (col 7/lines 28-34) configured to communicate with the network device control software program for later transmission over a network to a remote client to enable the remote client to remotely configure the network device (col 15/lines 37-col 16/line 67), the downloadable unit including a communicator component for establishing a communications channel between the remote client and the software program (col 21/lines 1-10), an interface component for enabling a user to communicate with the downloadable unit (col 8/lines 15-18, col 5/lines 12-20, col 16/line 6-39, col 6/lines 43-44), and a configuration component for managing and configuring the remote device or the software program (col 16/lines 37-63, col 5/lines 12-15); compiling the software program into a binary file (col 11/lines 32-33, col 16/lines 27-28); embedding the downloadable unit into the binary file (col 7/lines 28-34) storable in network devices (Fig. 2, (7, 10, 11, 12)); and loading the into binary file with the embedded downloadable unit onto the network device (col 7/lines 28-34); Hogan teaches a system/method for configuring a network device(s) (Fig. 2 (8)), comprising means for obtaining a software program for controlling/configuring said network device from a network device such as a

repository Server(s) (Fig. 2, (A)), obtaining repository (downloadable) units (52) comprising components configured to support communication with the remote client network device operating system to support the later transmission over the a network, the downloadable units comprising a piece of embedded software, component, prefabricated building software (i.e. framework) in a binary file product stored in a remote repositories (Fig. 1, (3)), accessed via said servers, (col 7/lines 28-34, col 8/lines 43-49, col 9/lines 14-36), means for generating a downloadable unit packet that enables user via corresponding component to select the files to be combined into a repository unit 52, downloadable via FTP or HTTP communication means support by clients web browser with server program, (col 16/lines 29-56, col 8/lines 11-14, col 13/lines 51-col 14/line 8), where downloadable units stored at may comprise: communication components means for establishing a connection (col 8/lines 15-18), interface components comprising means for supporting the user to communicate with the downloadable unit (col 11/lines 14-54), configuration components for managing and configuring the remote client device (col 16/lines 63-67, col 5/lines 12-15);

However Hogan does not explicitly teach where repository units (52) are denoted "downloadable units", compiling the software program into a binary file;

Lindholm teaches means for compiling software programs into a binary file portable (i.e. downloadable) files (col 1/lines 15-65), further embedding downloadable software (e.g. a Java class file, col 18/line 12-22) into the said binary file for execution on a remote client device (Fig. 1, 102) upon loading the binary files with the embedded downloadable software code onto the network device, wherein binary files obtained from server (Fig. 1, 104) executing an operating system are accessed from client network device executing a communication program interface that enables client network device communicate with server (col 4/lines 15-col 6/line 4, col 12/lines 29-43), a communication software program interface that enables network client to execute and display said binary file; and a communication software operating system for controlling said network device (Fig. 1);

It would have been obvious to one ordinary skilled in the art at the time the invention was made to modify Hogan's system with means for generating downloadable

units, as taught by Lindholm, by embedding downloadable units into a compiled binary file for transmitting to a remote client network device and loading the binary file with the embedded downloadable unit onto said network device, packing downloadable units comprising communication components means for establishing a connection, having interface components comprising means for supporting the user to communicate with the downloadable unit, configuration components for managing and configuring the remote client device, as discussed by Hogan, motivation would be make the these downloadable units independent of specific architecture or platform of the computer system, enabling these to be directly loaded in the run-time memory, where the receiving network is freed from handling the cycle of software purchase, installation, configuration and upgrade that is currently typical of software products.

Regarding claims 2 and 4, the combined teachings of Hogan and Lindholm as discussed above, teach features of the invention substantially as claimed, wherein the step of obtaining a downloadable unit includes embedding Java TM class (Lindholm: col 1/lines 39-65, col 5/line 34-59, Java classes: col 4/lines 47-56, downloadable units stored as Java class objects: col 12/line 36-50); wherein the step of obtaining a downloadable unit includes more than one downloadable unit (Hogan: col 7/lines 62-65, col 8/lines 59-col 9/lines 3, 30-36, col 13/lines 51-col 14/line 8).

Regarding claims 5-6, the combined teachings of Hogan and Lindholm as discussed above, further comprising the step of bundling the more than one downloadable units into a downloadable unit bundle (Hogan: col 7/lines 41-43, col 11/lines 32-33); and bundling the downloadable units according to function (Hogan: col 10/lines 24-36).

Regarding claims 7-8, the combined teachings of Hogan and Lindholm as discussed above, further comprising the step of bundling the downloadable unit cording to version (Hogan: col 9/lines 40-54); and bundling sharable downloadable units into a default bundle (Hogan: col 8/lines 43-52).

Regarding claim 9, the combined teachings of Hogan and Lindholm as discussed above, wherein the software program includes the operating system executing on network device (Hogan: col 7/lines 54-64).

Regarding claim 10, the combined teachings of Hogan and Lindholm as discussed above, wherein the network device includes a router (Hogan: col 17/lines 1-25).

Regarding claim 11, the combined teachings of Hogan and Lindholm as discussed above, further comprising the step of creating a table of contents for the downloadable unit bundle (Hogan: col 13/lines 51-col 14/line 8).

Regarding claim 12, the combined teachings of Hogan and Lindholm as discussed above, wherein the step of embedding the downloadable unit includes embedding the downloadable unit bundle into the binary file (Hogan: col 7/lines 28-34).

Regarding claim 14-15, and 17 this claim is the system associated with the method disclosed on claim 10, 2 and 5, respectively, same rationale is applicable.

Regarding claim 18, the combined teachings of Hogan and Lindholm as discussed above, wherein the downloadable units have been combined into downloadable unit bundles (Hogan: col 7/lines 28-34).

Regarding claims 19-22, this claim is the system associated with the method disclosed on claim 6-7, 9-10, respectively, same rationale is applicable.

Regarding claim 23 the combined teachings of Hogan and Lindholm as discussed above, wherein the web server communicates with the remote client using a file transfer protocol (Hogan: col 8/lines 11-14, col 8/line 59-col 9/line 6, col 11/line 15-17).

Regarding claim 24, the combined teachings of Hogan and Lindholm as discussed above, wherein the web server communicates with the remote client using an internet protocol (Hogan: col 8/lines 11-14, col 8/line 59-col 9/line 6, col 11/line 15-17, col 1/lines 18-21).

Regarding claim 25, the combined teachings of Hogan and Lindholm as discussed above, wherein the software program includes an extractor for extracting the embedded downloadable unit (Hogan: col 7/lines 41-46, col 11/lines 32-33, col 15/lines 64-67, col 16/line 27-28).

Regarding claim 26, the combined teachings of Hogan and Lindholm as discussed above, wherein the software program is currently executing on the network device (Hogan: col 12/lines 11-25, col 13/lines 51-col 14/line 8, Lindholm: Fig. 1, (102:132, 128, 138, 140, 142, 145), 104: 112, 120, 122, 145, 116)).

Regarding claim 28, this claim is substantially the same as claim 2, 15, same rationale is applicable.

Regarding claim 30, this claim is substantially the same as claim 5, 17, same rationale is applicable..

Regarding claim 31, this claim is substantially the same as claim 17 and 18, same rationale is applicable.

Regarding claim 32, this claim is substantially the same as claims 21, 26, same rationale is applicable.

Regarding claim 33, this claim is substantially the same as claims 10, 14, same rationale is applicable.

Regarding claim 34, the combined teachings of Hogan and Lindholm as discussed above, wherein the means for establishing a communications link includes means for using a URL (Hogan: col 8/lines 11-14, col 8/line 59-col 9/line 6, col 11/line 15-17, col 1/lines 18-21).

Regarding claim 35, the combined teachings of Hogan and Lindholm as discussed above, wherein the means for establishing a communications link includes means for opening an internet protocol connection (Hogan: col 8/lines 11-14, col 8/line 59-col 9/line 6, col 11/line 15-17, col 1/lines 18-21).

Regarding claim 36, this claim is substantially the same as claims 23, same rationale is applicable.

Regarding claim 37, the combined teachings of Hogan and Lindholm as discussed above, wherein the means for establishing a communications link includes a web engine (Hogan: 13/lines 1-6, col 11/line 14-24).

Regarding claim 38, the combined teachings of Hogan and Lindholm as discussed above, wherein the means for running the downloadable unit includes a Java Tm Virtual machine (JVM) (Lindholm: Fig. 1, 142, col 1/lines 39-50, col 5/lines 34-59).

Regarding claim 40-42, the combined teachings of Hogan and Lindholm as discussed above, a system/means and associated computer-storage medium storing program code for enabling a computer to execute stored code comprising the steps of: receiving from a remote client a request (Hogan: col 13/lines 51-col 14/line 24, 56-60, col 19/lines 30-40) to manage a network device control software program having a binary file (Hogan: col 11/lines 32-33, col 16/lines 27-28, col 7/lines 28-34, Lindholm: col 1/lines

15-65, col 18/line 12-22, col 4/lines 15-col 6/line 4, col 12/lines 29-43, Fig. 1); locating a downloadable unit which corresponds to the request and is embedded in the binary file (Hogan: col 14/lines 9-col 15/lines 13); extracting the downloadable unit from the binary file; and forwarding the downloadable unit to the remote client (Hogan: col 16/lines 57-62, col 7/lines 44-47) .

Regarding claim 43, the combined teachings of Hogan and Lindholm as discussed above, a system comprising: a web server for receiving from a remote client a request to manage a network device control software program which has a binary file with an embedded downloadable unit for performing the request, the downloadable unit including a communicator component for establishing a communications channel between the remote client and the software program, an interface component for enabling a user to communicate with the downloadable unit, and a configuration component for managing and configuring the remote device or the software program; an extractor coupled to the web server for extracting the downloadable unit from the binary file; and a communicator coupled to the extractor for forwarding the downloadable unit to the remote client (Hogan: Fig. 2 (8), (A), (52), (10), col 7/lines 28-34, col 8/lines 11-18, 43-49, col 9/lines 14-36, col 16/lines 29-67, col 13/lines 51-col 14/line 8, col 11/lines 14-54, col 5/lines 12-15, col 14/lines 9-col 15/lines 13, col 16/lines 57-62, col 7/lines 44-47) .

Regarding claim 45-46, the combined teachings of Hogan and Lindholm as discussed above, wherein the software program includes a list of available functions and downloadable unit available; (Hogan: col 13/lines 51-col 14/line 8).

4. Claim 44 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hogan et. al (Hogan) U.S. Patent No. 5,778,368 in view of Lindholm U.S. Patent No. 5,859,982 in further view of Nakagawa et. al. (Nakagawa) U.S. Patent No. 5,832,911.

Regarding claim 44, the combined teachings of Hogan and Lindholm as discussed above, a method for modifying available remote device management services, comprising the steps of: obtaining a new downloadable unit for performing a new service, the new downloadable unit including a communicator component for establishing a communication channel between the remote client and a network device control software program, an interface component for enabling a user to communicate with the downloadable unit, and a configuration component for managing and configuring the remote device or the software program; and loading the network device control software program binary file having the new downloadable unit onto the network device (Hogan: (Figs. 1-2, col 7/lines 28-34, col 15/lines 37-col 16/line 67, col 21/lines 1-10, col 8/lines 11-18, 43-49, col 5/lines 12-20, col 16/line 6-39, col 6/lines 43-44, col 11/lines 14-33, col 9/lines 14-36, col 13/lines 51-col 14/line 8), col 16/lines 63-67, Lindholm: col 1/lines 15-65, col 18/line 12-22) (Figs. 1-2, (102,104)), col 4/lines 15-col 6/line 4, col 12/lines 29-43); however neither Hogan nor Lindholm explicitly teach means for substituting the old downloadable unit for the new downloadable unit;

Nakagawa teaches a system/method related to software distribution and maintenance with which a software distributors can provide and update for a number of users software/services over a network, for systematically distributed/maintained, re-installing and upgrading via a network connecting many distributor and users of client/server software, wherein a client program automatically updates the software to the latest version according to the update instruction information when it is received (Nakagawa: col 1/line 13-col 5/line 10, abstract), disclosing means for retrieving the network device control software program binary file having an embedded old downloadable unit for performing an old service from a network device (Nakagawa: col 22/lines 35-62);

It would be obvious to one ordinary skilled in the art at the time the invention was made to modify exist system with means for retrieving the network device control software program binary file having an embedded old downloadable unit for performing an old service from a network device, as taught by Nakagawa, motivation would be to further enhance existing means for adding, upgrading services to include a software

distribution and maintenance means obtainable over a network for other various types of software such as product software, shareware, embedded software, freeware, scientific prototype software, intra-office software, etc, in an immediately operable form.

5. Claims 3, 16, 29 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hogan et. al (Hogan) U.S. Patent No. 5,778,368 in view of Lindholm U.S. Patent No. 5,859,982 in further view of Gish U.S. Patent 5,768,510.

Regarding claim 3, 16, 29, and 39, the combined teachings of Hogan and Lindholm as discussed above, however Hogan nor Lindholm explicitly teach wherein the step of obtaining a downloadable unit includes embedding ActiveX TM control and associated browser capabilities.

Gish teaches a system/method distributed computer system comprising client computer software, server computer and a network for connecting the client computer to the server computer which utilize an execution software code configured to couple the server computer and the client computer via the network, disclosing means for obtaining downloading units (applets) using ActiveX control technology for embedding software into downloadable units installing and configuring associated browser capabilities (Gish: col 15/line-col 16/line 8, col 16/lines 54-col 17/line 10);

It would have been obvious to one ordinary skilled in the art at the time the invention was made to modify existing system with means for obtaining a downloadable unit includes embedding ActiveX TM control and associated browser capabilities, as taught by Gish, motivation extend functionalities existing in Java (applets) technology to similar functions provided by ActiveX technologies, to give developers/designers to manufacture dynamic content for the Internet and network devices that work on multiple platforms, and are being widely supported, these small, fast components that enable developers to embed parts of software supported by a variety of programming languages, where one of ordinary skill in the art readily recognizes that ActiveX could be substituted for JAVA without undue experimentation to practice the invention.

Response to Arguments

6. It is argued (A) prior art of record Hogan does not teach claim limitation as recited; specifically because (i) prior art's repository units are merely stored, however even is defined as "embedded" this is distinguishable from "being embedded", downloadable units equated to repository units are distinguishable from a "repository operating system" (ii) repository units are executed on a customer hardware which is distinguishable from a repository system which never executes or contains repository units as part of its operating system, wherein the repository system is configured to prescribe the repository units and its components (iii) repository unit's execution affects the configuring and managing of the repository system which is distinguishable from affecting the "end-user product" (iv) repository units are not to be assembled into any program which is distinguishable from being made visible for software engineers to re-use (v) servers A-C are not software programs they are servers that provide access to reusable software. It is argued (B) office provided citations correlating claimed features with the prior art's features (Hogan) do not seem to relate, specifically citations provided to address the communicator, interface and configuration components claimed features; It is further argued (C) that prior art of record Hogan does not teach downloadable units, because claimed downloadable unit cannot be equated to prior art's "repository units";

7. In response to applicant's argument (A) that the references fail to show certain distinguishable features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "embedded units which are distinguishable from units being embedded, downloadable units from a repository operating system (ii) repository units which are distinguishable from a repository system which never executes or contains repository units as part of its operating system, repository system configured to prescribe the repository units and its components (iii) repository unit's execution affect the configuring and managing of the repository system (iv) repository units are not to be assembled into any program which is distinguishable from being made visible for software engineers to re-use (v) repository system comprising servers that software

programs distinguishable from servers that provide access to reusable software") are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

8. In response to argument B, (i) claimed "communicator component provides means for establishing a communication channel between the remote client and the software program"; provided citation which allegedly are non-related to claim features, citation relates to a desktop utility client program, however the RTES Application Player Desktop utility performs a link operation with an embedded software build downloaded from the RTES Repository, player allows the user to interface with the embedded software through its OS primitives and perform the task of the embedded software and provides the user with a graphical view of OS resource utilization and interaction with the downloaded software, this utility means having connecting multiple applications through communication interfaces means: (Hogan, col 21/lines 1-10), see applicant specifications page 13, lines 9-13, definition of functions of communicator component); (ii) regarding claimed "interface component for enabling user to communicate with downloadable unit"; provided citation which allegedly are non-related to claim features, citation relates to a client program which allows access to repository server and further citation discloses means for providing interfacing access means to said repository server, however these features meet claim limitation which is means that enable a user communicate with a downloadable unit, allegedly non-related desktop utility features would also be applicable to claim "interface component" functions. (iii) regarding claimed "configuration component" for managing and configuring the remote device or the software program; provided citations which allegedly are non-related to claim feature, prior art teaches downloadable units comprising configuration files with enable the user to configure the remote device, see Hogan col 17/lines 14-25 and as further discusses below).

9. In response to C, downloadable units as defined by applicant's specifications are defined as "any unit of code that can be downloadable to a web engine for performing a particular function", see page 3, lines 9-10, according to claims said units are configured with said components features discussed above, specifically prior art's repository units are defined as "the smallest piece of information relating to embedded software stored in the MXP Repository. This component may be a Component, Framework, audio file, or a normal text or binary file or the real-time embedded software itself (col 7/lines 28-34), a Repository Unit can also represent a collection of files with any combination of the above stated file types, repository units are composed of software Source Files, utility code, device drivers, communication Interface, software packages comprising configuring software in addition to mentioned utility code and device drivers other configuring software means such as Framemaker, MS Word, or WordPerfect, Picture Files that contain Drawings, Network Displays, Finite State Machines, or Data Description Diagrams; col 17/lines 14-47, these are downloadable units comprising configuration files associated with network devices); therefore Hogan teaches a "repository unit" are not distinguishable from claimed "downloadable units" specifically because said repository units are configured to perform claimed functions;

10. Applicant's arguments filed 08/20/01 has been fully considered but not found persuasive.

11. Information Disclosure Statement received 08/20/01, was considered and signed accordingly and a copy should be attached to this communication.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Prieto, B.** whose telephone number is **(703) 305-0750**. The Examiner can normally be reached on Monday-Friday from 6:30 to 4:00 p.m. If attempts to reach the examiner by telephone are unsuccessful, the Examiner's Supervisor, **Mark H. Rinehart** can be reached on **(703) 305-4815**. The fax phone number for the organization where this application or proceeding is assigned is **(703) 308-6606**. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is **(703) 305-3800/4700**.

Any response to this action should be mailed to:
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Or:
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Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Fourth Floor (Receptionist), further ensuring that a receipt is provided stamped "TC 2100".

B. Prieto
Patent Examiner
October 24, 2001

MEHMET B. GECKIL
PRIMARY EXAMINER

Meht Geckil